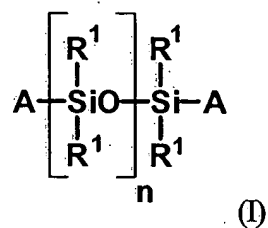


What is claimed is:

1. A polyestersiloxane acrylate obtainable by reacting

5 I) one or more organically modified polysiloxanes of the formula (I)

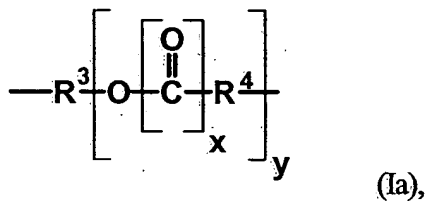


where the radicals

$R^1$  in the molecule are identical or different and are alkyl radicals,

10 A are identical or different and are  $-R^2-X$ , where

$R^2$  is a radical of the general formula (Ia)



15  $R^3$  is a divalent, optionally substituted alkyl or alkenyl radical,

$R^4$  radicals are identical to or different from one another and are  
divalent, optionally substituted alkyl or aralkyl radicals,

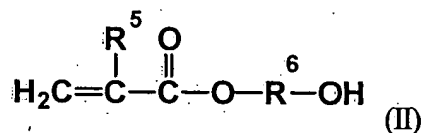
x independently at each occurrence is 0 or 1,

y independently at each occurrence has a value from 0 to 100, and

X is an isocyanate-reactive group, and

II.) one or more polyisocyanates having in each case at least two isocyanate groups,  
and

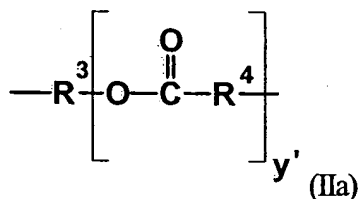
III.) one or more polyester acrylates or polyester methacrylates of the general formula  
(II)



in which

R<sup>5</sup> is a hydrogen atom or a methyl group and

R<sup>6</sup> is a radical of the general formula (IIa)



where

R<sup>3</sup> and R<sup>4</sup> are as defined above and

y' has a value from 1 to 50,

optionally in the presence of inhibitors, catalysts, additional compounds containing isocyanate-reactive groups.

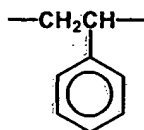
2. A polyestersiloxane acrylate as claimed in claim 1, obtainable by reacting one or more  
5 organically modified polysiloxanes of the formula (I) with one or more polyisocyanates  
having in each case at least two isocyanate groups in a molar ratio of from about 1:1.60 to  
about 1:1.95, and essentially equivalent amounts (based on OH groups of the compounds of  
the formula (II) and isocyanate groups of the prepolymer formed from compounds of the  
formula (I) and isocyanates) of one or more polyester acrylates or polyester methacrylates of  
10 the formula (II), optionally in the presence of inhibitors, catalysts, and additional compounds  
containing isocyanate-reactive groups.

3. The polyestersiloxane acrylate according to claim 2 wherein the additional compounds  
containing isocyanate reaction groups are present and the compounds are monofunctional-  
15 containing isocyanates.

4. The polyestersiloxane acrylate according the claim 1, wherein  $R^1$  is an identical or different  
alkyl radical having 1 to 4 carbon atoms and  $R^3$  is an optionally substituted alkyl or alkenyl  
radical having 2 to 11 carbon atoms.

5. The polyestersiloxane acrylate as claimed in claim 1, wherein in compounds of formula (I)  $R^3$   
independently at each occurrence is selected from the group consisting of  $-\text{CH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}(\text{CH}_3)-$ ,  $-\text{CH}_2\text{CH}_2\text{CH}_2-$ ,  $-(\text{CH}_2)_6-$ ,  $-(\text{CH}_2)_8-$ , and  $-\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)-$  and  $R^4$

independently at each occurrence is selected from the group consisting of  $-\text{CH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}(\text{CH}_3)-$ ,  $-\text{CH}_2\text{CH}_2\text{CH}_2-$ ,  $-(\text{CH}_2)_5-$ ,  $-(\text{CH}_2)_6-$ ,  $-(\text{CH}_2)_8-$ ,  $-\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)-$ ,  $-\text{CH}_2\text{CH}(\text{CH}_2\text{CH}_3)-$ , and



5

6. The polyestersiloxane acrylate as claimed in claim 1, wherein in compounds of formula (I)

n is from 5 to 100,

x is 0 or 1, and

10

y is from 0 to 20.

7. The polyestersiloxane acrylate as claimed in claim 1, wherein in compounds of formula (IIa)

y' is from 1 to 20.

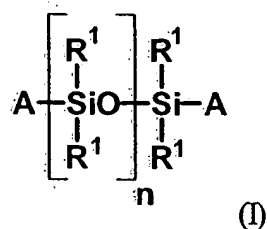
15

8. The polyestersiloxane acrylate as claimed in claim 1, the polyisocyanates are tolylene diisocyanate, hexamethylene diisocyanate, isophorone diisocyanate, diphenylmethane diisocyanate, tetramethylxylene diisocyanate or oligomers thereof.

9. A process for preparing a polyestersiloxane acrylate as claimed in claim 1, which comprises,  
in a first stage (S<sub>1</sub>)

20

- a) reacting one or more organically modified polysiloxanes of the general formula (I)

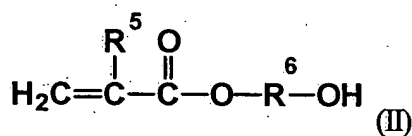


in which the radicals

A and R<sup>1</sup> are as defined above with

- 5           b) one or more polyisocyanates having in each case at least two isocyanate groups, optionally in the presence of inhibitors and catalysts, to form a prepolymer containing isocyanate groups;

subsequently in a second stage (S<sub>2</sub>) reacting said prepolymer with one or more polyester acrylates or polyester methacrylates of formula (II)



10           in which the radicals R<sup>5</sup> and R<sup>6</sup> are as defined above; and

optionally in a third stage (S<sub>3</sub>) reacting the product found with compounds containing isocyanate-reactive groups.

- 15           10. A radiation-curing coating comprising a radiation-curable compound and a polyestersiloxane acrylate according to claim 1.

11. A radiation-curing coating, printing ink and/or varnish comprising as additives from about 0.01 to about 10% by weight, based on the radiation-curing coating, ink or varnish, of one or more compounds as claimed in claim 1.